

WHAT IS CLAIMED AS NEW AND IS DESIRED TO BE SECURED BY LETTER
PATENT OF THE UNITED STATES IS:

1. A communications terminal apparatus, comprising:
- 5 a communications system configured to perform electronic communications with a manager supervising said apparatus;
- a detector detecting a status of usage of a consumable product used in said apparatus and supplied by a service
- 10 depot;
- a register registering electronic communications addresses of said manager and said service depot, identification of said apparatus, specification of said consumable product, and identification of said service depot;
- 15 and
- a controller configured to send a request for supplying said consumable product to said manager using said electronic communications address when said detector detects that said consumable product is nearly ended and a report for reporting
- 20 a completion of supplying said consumable product on said apparatus when said detector detects that said consumable product is refilled, said request including said identification of said apparatus, said specification of said consumable product, and said identification of said service
- 25 depot.

2. A communications terminal apparatus as defined in Claim 1, wherein said communications system performs E-mail communications with said manager.

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3. A communications terminal apparatus as defined in Claim 1, wherein said consumable product includes toner.

4. A communications terminal apparatus as defined in Claim 1, wherein said communications system performs facsimile communications with said manager.

5. A communications terminal apparatus, comprising:
a communications system configured to perform
15 electronic communications with a manager supervising said apparatus and a service depot providing a repair service to said apparatus;

a detector detecting an event indicative of a defect in a maintenance component used in said apparatus;

20 a register registering electronic communications addresses of said manager and said service depot, identification of said apparatus, and information of said event, and identification of said service depot; and

a controller configured to send a request for said
25 repair service to said manager and said service depot using

the respectively registered electronic communications addresses when said detector detects said event and a report for reporting a completion of said repair service on said apparatus when said detector detects no defect of said

5 maintenance component, said request including said identification of said apparatus, said specification of said maintenance component, and said identification of said service depot.

10 6. A communications terminal apparatus as defined in Claim 5, wherein said communications system performs E-mail communications with said manager and said service depot.

15 7. A communications terminal apparatus as defined in Claim 5, wherein said maintenance component includes a photoconductor.

20 8. A communications terminal apparatus as defined in Claim 5, wherein said communications system performs facsimile communications with said manager and said service depot.

25 9. An image forming apparatus, comprising:
a communications system configured to perform electronic communications with a manager supervising said

apparatus;

a detector detecting a status of usage of a consumable product used in said apparatus and supplied by a service depot;

- 5 a register registering electronic communications addresses of said manager and said service depot, identification of said apparatus, specification of said consumable product, and identification of said service depot; and

- 10 a controller configured to send a request for supplying said consumable product to said manager using said electronic communications address when said detector detects that said consumable product is nearly ended and a report for reporting a completion of supplying said consumable product on said
- 15 apparatus when said detector detects that said consumable product is refilled, said request including said identification of said apparatus, said specification of said consumable, and said identification of said service depot.

- 20 10. An image forming apparatus as defined in Claim 9, wherein said communications system performs E-mail communications with said manager.

11. A communications terminal apparatus as defined in
- 25 Claim 9, wherein said consumable product includes toner.

12. An image forming apparatus, comprising:
a communications system configured to perform
electronic communications with a manager supervising said
5 apparatus and a service depot providing a repair service to
said apparatus;
a detector detecting an event indicative of a defect in
a maintenance component used in said apparatus is defective;
a register registering electronic communications
10 addresses of said manager and said service depot,
identification of said apparatus, and information of said
event, and identification of said service depot; and
a controller configured to send a request for said
repair service to said manager and said service depot using
15 the respectively registered electronic communications
addresses when said detector detects said event and a report
for reporting a completion of said repair service on said
apparatus when said detector detects no defect of said
maintenance component, said request including said
20 identification of said apparatus, said information of said
event, and said identification of said service depot.

13. An image forming apparatus as defined in Claim 12,
wherein said communications system performs E-mail
25 communications with said data terminal and said service depot.

14. An image forming apparatus as defined in Claim 12,
wherein said maintenance component includes a photoconductor.

5 15. A communications terminal apparatus, comprising:
 a communications system configured to perform E-mail
communications and facsimile communications with a manager
supervising said apparatus;

 a consumable product status detector configured to
10 detect a status of said consumable product used in said
apparatus and supplied by a service depot;

 a manager registration system configured to register an
E-mail address and a telephone number of said manager;

 a service depot registration system configured to
15 register an E-mail address and a telephone number of said
service depot;

 a terminal identification information registration
system configured to register terminal identification
information of said apparatus;

20 a consumable product information registration system
configured to register identification of a supplier of said
consumable product and specification of said consumable
product; and

 a mail controlling system configured to send a first E-
25 mail requesting a delivery of said consumable product to said

manager registered in said manager registration system when
said consumable product is determined to be in a short supply
status based on detect information detected by said
consumable product status detector and a second E-mail
5 reporting a completion of supplying said consumable product
to said apparatus when said consumable product is determined
to be in a refilled status based on detect information
detected by said consumable product status detector, said
first E-mail including said terminal identification
10 information, said information of said supplier of said
consumable product, and said specification of said consumable
product.

16. A communications terminal apparatus as defined in
15 Claim 15, further comprising:

an analyzer configured to analyze E-mail including
request receipt acknowledgement information notified from
either said manager or said service depot with respect to
said first E-mail;

20 a display displaying said request receipt
acknowledgement information,

wherein said mail controlling system controls said
display to display said request receipt acknowledgement
information analyzed by said analyzer, and controls said
25 display to stop displaying when said consumable product is

determined to be in said refilled status based on said detect information detected by said consumable product status detector.

5 17. A communications terminal apparatus as defined in Claim 15, wherein said terminal identification information includes at least one of an E-mail address, a serial number, facsimile TTI information, and a telephone number of said apparatus.

10 18. A communications terminal apparatus as defined in Claim 15, wherein said identification of said supplier of said consumable product includes at least one of an E-mail address and a telephone number.

15 19. A communications terminal apparatus as defined in Claim 15, wherein said mail controlling system notifies said manager through said facsimile communications using said telephone number registered in said manager registration
20 system when said E-mail communications is not available to at least one of said manager and said service depot.

 20. A communications terminal apparatus, comprising:
 a communications system configured to perform E-mail
25 communications and facsimile communications with a manager

supervising said apparatus and a service depot providing a repair service to said apparatus;

a maintenance status detector configured to detect an event indicative of a need to repair a specific maintenance

5 component;

a manager registration system configured to register an E-mail address and a telephone number of said manager;

a service depot registration system configured to register an E-mail address and a telephone number of said

10 service depot;

a terminal identification information registration system configured to register terminal identification information of said apparatus; and

a mail controlling system configured to send a first E-mail requesting a repair service to said manager registered in said manager registration system and to said service depot registered in said service depot registration system when said maintenance status detector detects said event and a second E-mail reporting a completion of said repair service
15 when said service maintenance is determined as completed based on detect information detected by said maintenance status detector, said first E-mail including said terminal identification information and information necessary for said repair service.
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21. A communications terminal apparatus as defined in Claim 20, further comprising:

an analyzer configured to analyze E-mail including request receipt acknowledgement information notified from
5 either said manager or said service depot with respect to said first E-mail;

a display displaying said request receipt acknowledgement information,

wherein said mail controlling system controls said
10 display to display said request receipt acknowledgement information analyzed by said analyzer, and controls said display to stop displaying when said repair service is determined as completed based on detect information detected by said maintenance status detector.

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22. A communications terminal apparatus as defined in Claim 20, wherein said mail controlling system notifies at least one of said manager and said service depot through said facsimile communications using said telephone numbers
20 respectively registered in said manager registration system and said service depot registration system when said E-mail communications is not available to at least one of said manager and said service depot.

25 23. A communications terminal apparatus, comprising:

communications means for performing E-mail
communications and facsimile communications with a manager
supervising said apparatus;

consumable product status detecting means for detecting
5 a status of said consumable product used in said apparatus
and supplied by a service depot;

manager registering means for registering an E-mail
address and a telephone number of said manager;

service depot registering means for registering an E-
10 mail address and a telephone number of said service depot;

terminal identification information registering means
for registering terminal identification information of said
apparatus;

consumable product information registering means for
15 registering identification of a supplier of said consumable
product and specification of said consumable product; and

mail controlling means for sending a first E-mail
requesting a delivery of said consumable product to said
manager registered in said manager registering means when
20 said consumable product is determined to be in a short supply
status based on detect information detected by said
consumable product status detecting means and a second E-mail
reporting a completion of supplying said consumable product
to said apparatus when said consumable product is determined
25 to be in a refilled status based on detect information

detected by said consumable product status detecting means,
said first E-mail including said terminal identification
information, said information of said supplier of said
consumable product, and said specification of said consumable
5 product.

24. A communications terminal apparatus as defined in
Claim 23, further comprising:

analyzing means for analyzing E-mail including request
10 receipt acknowledgement information notified from either said
manager or said service depot with respect to said first E-
mail;

displaying means for displaying said request receipt
acknowledgement information,

15 wherein said mail controlling means controls said
displaying means to display said request receipt
acknowledgement information analyzed by said analyzing means,
and controls said displaying means to stop displaying when
said consumable product is determined to be in said refilled
20 status based on said detect information detected by said
consumable product status detecting means.

25. A communications terminal apparatus as defined in
Claim 23, wherein said terminal identification information
25 includes at least one of an E-mail address, a serial number,

facsimile TTI information, and a telephone number of said apparatus.

26. A communications terminal apparatus as defined in
5 Claim 23, wherein said identification of said supplier of
said consumable product includes at least one of an E-mail
address and a telephone number.

27. A communications terminal apparatus as defined in
10 Claim 23, wherein said mail controlling means notifies said
manager through said facsimile communications using said
telephone number registered in said manager registering means
when said E-mail communications is not available to at least
one of said manager and said service depot.

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28. A communications terminal apparatus, comprising:
communications means for performing E-mail
communications and facsimile communications with a manager
supervising said apparatus and a service depot providing a
20 repair service to said apparatus;

maintenance status detecting means for detecting an
event indicative of a need to repair a specific maintenance
component;

manager registering means for registering an E-mail
25 address and a telephone number of said manager;

service depot registering means for registering an E-mail address and a telephone number of said service depot;

terminal identification information registering means for registering terminal identification information of said apparatus; and

mail controlling means for sending a first E-mail requesting a repair service to said manager registered in said manager registering means and to said service depot registered in said service depot registering means when said maintenance status detecting means detects said event and a second E-mail reporting a completion of said repair service when said service maintenance is determined as completed based on detect information detected by said maintenance status detecting means, said first E-mail including said terminal identification information and information necessary for said repair service.

29. A communications terminal apparatus as defined in Claim 28, further comprising:

analyzing means for analyzing E-mail including request receipt acknowledgement information notified from either said manager or said service depot with respect to said first E-mail;

displaying means for displaying said request receipt acknowledgement information,

wherein said mail controlling means controls said displaying means to display said request receipt acknowledgement information analyzed by said analyzing means, and controls said displaying means to stop displaying when
5 said repair service is determined as completed based on detect information detected by said maintenance status detecting means.

30. A communications terminal apparatus as defined in
10 Claim 28, wherein said mail controlling means notifies at least one of said manager and said service depot through said facsimile communications using said telephone numbers respectively registered in said manager registering means and said service depot registering means when said E-mail
15 communications is not available to at least one of said manager and said service depot.

31. A method of ordering a consumable product on a communications terminal apparatus, comprising the steps of:
20 registering electronic communications addresses of a manager supervising said apparatus and a service depot supplying said consumable product, identification of said apparatus, specification of said consumable product, and identification of said service depot;
25 detecting an event indicating that said consumable

product is nearly ended;

 sending a request for supplying said consumable product
to said manager using said electronic communications address,
said request including said identification of said apparatus,
5 said specification of said consumable product, and said
identification of said service depot;

 determining that said consumable product has been
supplied to said apparatus; and

 reporting to said manager a completion of supplying
10 said consumable product on said apparatus.

32. A method as defined in Claim 31, wherein said
sending and reporting steps perform E-mail communications
with said manager.

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33. A method as defined in Claim 31, wherein said
consumable product includes toner.

34. A method as defined in Claim 31, wherein said
20 sending and reporting steps perform facsimile communications
with said manager.

35. A method of ordering a repair service on a
communications terminal apparatus, comprising the steps of:
25 registering electronic communications addresses of a

manager supervising said apparatus and a service depot providing said repair service, identification of said apparatus, specification of a maintenance component, and identification of said service depot;

5 detecting an event indicating that said maintenance component is defective;

 sending a request for said repair service to said manager and said service depot using the respectively registered electronic communications addresses, said request
10 including said identification of said apparatus, said specification of said maintenance component, and said identification of said service depot;

 determining thereafter that said maintenance component is not defective; and

15 reporting to said manager a completion of performing said repair service on said apparatus.

36. A method as defined in Claim 35, wherein said sending and reporting steps perform E-mail communications
20 with said manager and said service depot.

37. A method as defined in Claim 35, wherein said maintenance component includes a photoconductor.

25 38. A method as defined in Claim 35, wherein said

sending and reporting steps perform facsimile communications with said manager and said service depot.

39. A method of maintaining a system that comprises
5 networked units that may require from time to time at least one of replenishing consumables and servicing of components, wherein said consumables or servicing are provided by at least one external facility and said system of networked units is supervised by a manager who need not be at the
10 premises of said units, said method comprising:
automatically detecting a first event indicative of a requirement for replenishing consumables or servicing components at any one of said networked units, and generating a first detection signal in
15 response to a detection of a first event at the unit;
responding to the generation of a first detection signal at the unit to automatically generate and electronically transmit a first notification to
20 each of (a) the manager supervising the networked units, and (b) the at least one external facility;
wherein said first notification identifies at least said unit and said event to thereby advise both the manager and the at least one facility (a) which of
25 the networked units has a requirement. and (b) what

is the requirement;

automatically detecting thereafter at said unit a second
event indicating that the requirement has been
satisfied, and generating a second detection signal
5 in response to a detection of said second event;
and

responding to the generation of said second detection
signal to automatically generate and transmit a
second notification to at least one of said manager
and said at least one facility;

10 said second notification advising that the requirement
has been met.

40. A method as in claim 39 including receiving at
15 the unit, in response to said transmitting of said first
notification, a first communication from at least one of said
manager and said at least one external facility and
displaying a selected representation of said response at the
unit.

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41. A method as in claim 40 in which said
communication is from said at least one external facility and
advise when the request is expected to be met.

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42. A method as in claim 39 in which said transmitting of a detection signal to said manager comprises transmitting via email.

5 43. A method as in claim 39 in which said transmitting of a detection signal to said manager comprises transmitting via facsimile.

44. A method as in claim 39 in which said first event
10 is indicative of a requirement to replenish toner.

45. A method as in claim 39 in which said first event is indicative of a requirement to service a heater in said unit.

15 46. A method as in claim 39 in which said first event is indicative of a requirement to replace a photoconductor in said unit.

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